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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,812	07/10/2001	Andres Hejlsberg	MS1-866US	6426
22801	7590	11/13/2006	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			CAO, DIEM K	
			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/902,812

Applicant(s)

HEJLSBERG ET AL.

Examiner

Diem K. Cao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-16 and 18-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-16 and 18-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/3/06, 8/30/06.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1, 3-16 and 18-40 are pending.
2. In view of the Appeal Brief filed on 9/7/2006, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 3-16, and 18-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. 101 for machine and manufacture claims is that the claims cover only embodiments which necessarily meet the requirements to fall within a statutory category, i.e., the claims recite physical articles or objects to meet the requirements of

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being a machine or manufacture. For method claims and claims that recite a judicial exception (software), in addition to needing to meet the criteria above, the claim must be directed to a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result as evidence of it being a practical application.

Claims 1, 3-4, 16 and 18-27 fail to include any physical articles or objects, and the "network platform" in claims 16, 18-27 is software platform (see Specification, page 5, lines 10-15). Thus, claims 1, 3-4, 16 and 18-27 are directed to non-statutory subject matter.

Claims 5-14 are directed to an application programming interface which is an abstract idea that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. The claim is just a mere arrangement of data (information) without creating any functional interrelationship among the elements of the data structure. Therefore, the claimed invention is directed to non-statutory subject matter. Furthermore, the "computer readable media" as defined by the specification includes communication media, such as data signal or carrier wave. In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-16, and 18-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohn et al (Web Programming with Visual J++) in view of Flanagan (Java in a Nutshell) further in view of Microsoft Corp (Delegates in Visual J++ 6.0).

As to claim 5, Cohn teaches an API comprising multiple types related to construction user interfaces (In Java, and applets Scrollbars; chapter 5, page 1 and A Container class ... or any other component; chapter 6, page 1. Also see in chapter 5, pages 5, 7, 8 for example of public member methods of some classes), classes which represent managed heap allocated data that has reference assignment semantics (Buttons class, constructed and use a button ... after the button is created the add method is used to add the button to the applet; chapter 5, pages 3-4).

Cohn does not explicitly teach interfaces that define a contract that other types can implement, delegates that are object oriented function pointers, structures that represent static allocated data that has value assignment semantic and enumerations which are value types that represent named constants.

However, Flanagan teaches interfaces (LayoutManager, Enumeration) that define a contract that other types can implement (java.awt.FlowLayout, this class implements the LayoutManager interface; page 250; Also see classes BorderLayout, CardLayout, GridBagConstraints, etc. that implements the LayoutManager interface; fig. 19-2), structures that represent static allocated data that has value assignment semantic (java.util.Hashtable ... data

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structure; page 342) and enumerations which are value types that represent named constants (java.util.Enumera^{tion}; page 342). Cohn suggests that this book does not include the basic of the Java language, and Flanagan is a good API reference for Java language. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Cohn and Flanagan because Cohn teaches Visual J++ is unique in extending Java with the ability to use ActiveX controls from within Java (Introduction, page 12, second paragraph), and to fully understand all the methods that are provided by the Java classes in order to use them when implementing applications.

Microsoft teaches delegates that are object oriented function pointers (page 1, first paragraph). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Microsoft to the system of Cohn and Flanagan because Microsoft teaches delegates address many of scenarios that are addressed by function pointers, delegates are object oriented, type safe and secure (page 2, see section How are delegates different from function pointers)

As to claim 6, Flanagan teaches the classes comprise a form class that represents a window or a dialog box that makes up an application's user interface (java.awt.Dialog, This class encapsulates a dialog box window ... with setLayout(); page 247).

As to claim 7, Flanagan teaches the form class has multiple members comprising one or more of public static properties, public static methods, public instance constructors, public instance methods, public instance properties, public instance events, protected instance

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properties, and protected instance methods (public Dialog (Frame parent, Boolean modal), public String getTitle(); page 247).

As to claim 8, Flanagan teaches the interfaces comprise a button control interface that allows a control to act like a button on a form (java.awt.Button encapsulates a GUI pushbutton that displays a specified textual label; page 240).

As to claim 9, Flanagan teaches the interfaces comprise a container control interface that provides functionality for a control to act as a parent for other controls (java.awt.Container implements a component that can contain other components; page 246).

As to claim 10, Flanagan teaches the interfaces comprise an editing notification interface (java.awt.TextArea, java.awt.TextComponent, java.awt.TextField; pages 267-268).

As to claim 11, Flanagan teaches interfaces comprise a data object interface that provides a format independent mechanism for transferring data (java.awt.fontMetrics, java.art.Graphics, java.art.Images; Fig. 19-1 and associated text; page 238).

As to claim 12, Flanagan teaches the interfaces comprise a feature support interface that specifies a standard interface for retrieving feature information from a current system (System.getProperties(), Font.getFont(), Color.getColor(); page 193).

As to claim 13, Flanagan teaches the interfaces comprise a message filter interface (applet security, java.lang.SecurityManager class defines a number of methods that the system calls to check whether a certain operation is permitted in the current environment; page 199).

As to claim 14, Flanagan teaches the interfaces comprise a handle-exposing interface to expose handles (java.awt.Container, getComponents() returns an array of the components contained in a container; page 246).

As to claim 15, see rejections of claims 8-14 above.

As to claim 31, see rejection of claim 5 above.

As to claim 32-40, see rejection of claims 6-14 above.

As to claim 1, see rejection of claim 5 above. Cohn further teaches an application configured to handle requests submitted by remote devices over a network (server programs, requests, clients; chapter 19, page 3, 2nd paragraph), and an application interface to present functions used by the application to access network and computing resources of the distributed computing system (Table 17.2; Chapter 17, page 4 and page 1).

As to claim 3, Cohn teaches the distributed computing system comprises client devices and server devices that handle requests from the client devices, the remote devices comprising at least one client device (chapter 19, page 1, section the Client/Server Model and page 4, The

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server program ... as an application).

As to claim 4, Cohn teaches the distributed computing system comprises client devices and server devices that handle requests from the client devices (chapter 19, page 1, section the Client/Server Model and page 4, The server program ... as an application). Cohn does not explicitly teach the remote devices comprising at least one server device that is configured as a Web server. However, web server is popular in the art of the Internet, and Cohn teaches the client/server model in the network environment, it would have been obvious a web server is also existed.

As to claim 16, see rejection of claim 1 above.

As to claim 28, see rejection of claim 1 above. Cohn further teaches a computer system including one or more microprocessors and one or more software programs (inherent from host, client applets; chapter 19 "Client-Server Programming", page 1), the one or more software programs utilizing an application program interface to request services from an operating system (inherent from host and requests from client applets and applications ; chapter 19, page 1 and 4).

As to claim 29, see rejection of claim 1 above.

As to claim 30, Cohn teaches receiving a request from a remote computing device, the request containing a call to the set of functions (chapter 19, page 3 and page 6, class

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Ex19aApplicationFrame).

As to claims 18-27, see rejections of claims 6-15 above.

Response to Arguments

In the Appeal Brief, Applicant argued in substance that (1) Cohn does not teach nor discuss of an API, (2) there is no motivation to combine the teaching of Cohn and Flanagan, (3) Flanagan neither disclose nor suggest functions "grouped into multiple namespaces".

Examiner respectfully disagrees with the Applicant's arguments:

- As to the point (1), API as defined and understood by one of ordinary skill in the art is the set of function or method calls that can be invoked by applications. Cohn teaches multiple public methods for multiple classes (for example of a public member method of a few classes are described in chapter 5, pages 5, 7, 8), clearly, Cohn teaches API. Therefore, the arguments are not persuasive.

- As to the point (2), Cohn teaches Visual J++ extends Java. Cohn also said the book does not provide the basic of the Java language, nor an API reference. Flanagan teaches basic of Java languages with all the information what are they and how to use them in the application. It would have been obvious to one of ordinary skill in the art at the art would combine the teaching of Cohn and Flanagan for information of how to using Java in Visual J++ with details of each Java class and its supported methods.

- As to the point (3), Flanagan teaches functions are grouped into multiple namespaces

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(java.lang, java.awt, java.applet; Fig. 19-2, page 239).

Therefore, the arguments are not persuasive and the rejection is maintained.

The prosecution is re-opened to address claims that are directed to non-statutory subject matter, and re-map to show how each element of the instant application is taught by references.

No new reference is used in this rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC
November 7 2006


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